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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/766,295	01/27/2004	Guy E. Horne JR.	02579-P0027B	9340
24126	7590	11/14/2005		
ST. ONGE STEWARD JOHNSTON & REENS, LLC				
986 BEDFORD STREET				
STAMFORD, CT 06905-5619				
			EXAMINER	
			FLANAGAN, BEVERLY MEINDL	
			ART UNIT	PAPER NUMBER
			3739	

DATE MAILED: 11/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

TJH

**Office Action Summary**

Application No.

10/766,295

Applicant(s)

HORNE ET AL.

Examiner

Beverly M. Flanagan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

*Beverly M. Flanagan*  
 BEVERLY M. FLANAGAN  
 PRIMARY EXAMINER

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
 Paper No(s)/Mail Date 3/64; 1/04; 8/05
- 4) ☐ Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statements filed March 22, 2004, July 8, 2004 and August 8, 2005 have been made of record and the references cited therein have been considered by the examiner.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 11 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 11, the phrase "wear layer" lacks appropriate antecedent basis.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-7 and 13 are rejected under 35 U.S.C. 102(e) as being anticipated by Konstorum et al. (U.S. Patent No. 6,749,560).

**In regard to claims 1-7 and 13**, Konstorum et al. teach an endoscope 10 having a shaft 14 comprised of a frame 26 and a cover 32 (see Figure 1). Frame 26 comprises a tube 40 that is preferably formed from a shape memory alloy material, such as Nitinol (see col. 3, lines 10-25). Tube 40 has slots 46 along at least part of its length where the pattern of slots can be varied and sections of slot patterns are provided, to vary the flexibility of the tube 40 (see col. 3, lines 29-51). The slots 46 provide the tube 40 with increased flexibility along the length of the first section 52 of the tube 40 (see col. 4, lines 1-5). Figure 3 shows that the slots 46 are positioned along a line parallel to the axis of the tube 40 and have an axis oriented at an angle to the axis of the tubular member, where the angle is in the range from zero to ninety degrees. Figure 3 also shows that the slots 46 are circumferentially positioned on the tube 40. Cover 32 is preferably comprised of a resilient plastic or polymer material (see col. 5, lines 7-8).

Claims 1-6 are rejected under 35 U.S.C. 102(b) as being anticipated by Sosnowski et al. (U.S. Patent No. 4,911,148).

**In regard to claims 1-6**, Sosnowski et al. teach an endoscope having a shaft subassembly 1 comprised of a tubular sheath 34 preferably formed of a thermoplastic elastomeric material encasing a deflectable end segment 5 that has a series of cutouts 25 formed in the wall (see Figure 3B and col. 5, lines 24-37). Figure 2 shows that the cutouts 25 comprised of pattern and are positioned along a line parallel to the axis of the end segment 5. Figure 2 also shows that the cutouts 25 have an axis oriented at an angle to the axis of the end segment 5 and the angle is in the range from zero to ninety degrees.

Claims 14 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Sugiyama et al. (U.S. Patent No. 6,520,214).

**In regard to claims 14 and 15**, Sugiyama et al. teach an endoscope 100 having a flexible tube 1 with an innermost layer formed from a spirally-wound tube 10 that is covered with a braided tube 20 and the braided tube 20 is covered with a flexible sheath 30 (see Figures 1 and 2). The sheath 30 is made from a polymer material (see col. 6, lines 5-20) and the material of sheath 30 is melted and extrusion forming is performed, so that the material of sheath 30 passes through interstices 21 of the braided tube 20 (see col. 6, lines 27-35). The endoscope is then cool-hardened (see col. 6, lines 35-37).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Konstorum et al. (U.S. Patent No. 6,749,560) in view of Sugiyama et al. (U.S. Patent No. 6,520,214).

**In regard to claims 8-12**, Konstorum et al. teaches that cover 32 could also include a structural reinforcement (see col. 5, lines 7-10). Sugiyama et al. disclose a similar endoscope having a flexible tube 1 with an innermost layer formed from a spirally-wound tube 10 that is covered with a braided tube 20 and the braided tube 20 is covered with a flexible sheath 30 (see Figures 1 and 2). Sugiyama et al. thus demonstrate that multi-layer tubular structures for endoscope are well known in the art. Accordingly, since Konstorum et al. disclose the use of a structure reinforcement, it would have been obvious for one of ordinary skill in the art at the time the invention was made to provide the endoscope of Konstorum et al. with the multi-layer arrangement disclosed by Sugiyama et al.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Applicant should note the following prior art references teaching

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endoscopes with slots or cutouts to enhance the flexibility of the endoscope: Martone et al., U.S. Patent Application Publication No. 2003/0130564; Grabover et al., U.S. Patent No. 6,780,151; Grinberg et al., U.S. Patent No. 5,921,956; Emerson, U.S. Patent No. 4,353,358; Siegmund et al., U.S. Patent No. 4,580,551; Petruzzi, U.S. Patent No. 4,669,172 and Pauker, U.S. Patent No. 6,616,600.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Beverly M. Flanagan whose telephone number is (571) 272-4766. The examiner can normally be reached on Mondays, Tuesdays and Thursdays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Beverly M. Flanagan  
Primary Examiner  
Art Unit 3739

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